

b. detecting the presence of the isolated one or more certain analyte species through the use of a mass spectrometer to determine whether each of the one or more certain analyte species was present in the specimen; and

c. determining the identity of the one or more certain analyte species via molecular weight analysis.

2-124 37
34 The method of claim 33, further including the steps of:

a. immobilizing an antibody onto a solid substrate to produce said affinity reagent;

b. combining an effective amount of the affinity reagent with the specimen until the affinity reagent binds with each of the one or more certain analyte species that is present in the specimen to produce a post-combination affinity reagent and an unbound remainder;

c. separating the post-combination affinity reagent from the unbound remainder to form an isolated post-combination affinity reagent;

d. adding a laser desorption/ionization agent to the isolated post-combination affinity reagent to form a mass spectrometric mixture; and

e. mass spectrometrically analyzing the mass spectrometric mixture to produce a mass spectrum, said mass spectrum indicating whether the specimen contained each of the one or more certain analyte species by exhibiting a mass spectrometric response located at the unique mass-to-charge ratio of each of the certain analyte species.

2-124 38
35 The method of claim 34 wherein the step of combining an effective amount of the affinity reagent with the specimen is accomplished using micropipette tip in which there is a filter element to which the affinity reagent is bound.

2-124 39
36 The method of claim 34 further including the step of adding a disassociation agent to the isolated post-combination affinity reagent prior to the step of adding the laser desorption/ionization agent.

2-124 40
37 The method of claim 36 wherein the step of combining an effective amount of the affinity reagent with the specimen is accomplished using micropipette tip in which there is a filter element to which the affinity reagent is bound.

2-124 41
38 The method of claim 33, further including the steps of:

a. immobilizing a plurality of antibodies onto a solid substrate to produce said affinity reagent;

b. combining an effective amount of the affinity reagent with the specimen until the affinity reagent binds with each of the one or more certain analyte species that is